



## This is an official **DHEC Health Update**

Distributed via Health Alert Network  
July 17, 2014, 10:00 AM  
10322-DHU-07-17-2014-CHIK

### **Updated Guidance for Healthcare Providers: Chikungunya Virus Infections**

#### **Summary**

On December 7, 2013, the World Health Organization (WHO) reported the first local (autochthonous) transmission of chikungunya virus in the Americas, which occurred on the Caribbean island of Saint Martin. Since that time, local transmission of chikungunya has spread throughout the islands of the Caribbean. The Pan American Health Organization (PAHO) reports that as of July 6, 2014, over 260,000 chikungunya cases have been detected, including 21 deaths.

In the United States, as of July 10, 2014, 28 states have detected 154 imported cases of chikungunya associated with this outbreak. South Carolina has confirmed two imported cases of chikungunya.

#### **Recommendations for Health Care Providers**

- Chikungunya infection should be considered in patients with acute onset of fever and polyarthralgias, especially those who have recently traveled to areas where transmission is occurring.
- Dengue infection should also be considered in patients, who have recently traveled to a locale known to have currently circulating dengue virus, as the symptoms for both conditions can be similar. Dengue should be ruled out to aid in clinical management for improved patient outcomes.
- Healthcare providers should report suspected chikungunya cases to DHEC to facilitate diagnosis and to mitigate the risk of local transmission.
- **Laboratory Testing:**
  - Laboratory diagnosis is accomplished by testing serum or other bodily fluids (excluding CSF) to detect virus, specific viral antigen, viral nucleic acid, or virus-specific IgM and neutralizing antibodies.
  - Accuracy of specific laboratory tests is dependent on the time that has elapsed between onset of symptoms and sample collection.
  - Providers should contact DHEC, Division of Acute Disease Epidemiology (DADE), to request information on laboratory testing of suspected chikungunya cases. Call (803) 898-0861, and ask to speak to the Medical Consultant On-Call.

#### **Background**

Chikungunya virus is a mosquito-borne alphavirus transmitted primarily by *Aedes aegypti* and *Aedes albopictus* mosquitoes. Humans are the primary reservoir during epidemics. Earlier outbreaks have been documented in Africa, Southern Europe, Southeast Asia, the Indian subcontinent, and islands in the Indian and Pacific Oceans. Prior to the Caribbean outbreak, the only chikungunya cases identified in the Americas were in travelers returning from those endemic areas.

#### **Map of countries and territories where chikungunya cases have been reported:**

<http://www.cdc.gov/chikungunya/geo/index.html>

### *Clinical Presentation*

Approximately 3%-28% of people infected with chikungunya virus will remain asymptomatic. For those who develop symptoms, the incubation period for infection is typically 3–7 days (range, 2–12 days). The most common clinical findings are acute onset of fever (temperature typically higher than 102° F [39°C]) and severe joint pain or stiffness. Joint pains are severe, and may be debilitating. They are usually symmetric and occur most commonly in hands and feet, but they can affect more proximal joints. Other symptoms may include headache, myalgia, rash, nausea, vomiting, and fatigue. Persons at risk for more severe disease include neonates exposed intrapartum, adults over 65 years, and persons with underlying medical conditions (e.g., hypertension, diabetes, or cardiovascular disease).

It is difficult to distinguish chikungunya and dengue based on clinical findings alone. Patients with suspected chikungunya should be managed as dengue until dengue has been ruled out.

### *Treatment*

No specific antiviral treatment is available for chikungunya. Treatment is generally palliative and can include rest, fluids, and use of analgesics and antipyretics. Use acetaminophen or paracetamol for initial fever and pain control. If the patient may have dengue, do not use aspirin or other NSAIDs until they have been afebrile ≥48 hours and have no warning signs for severe dengue.

### *Prevention*

No vaccine or medication is available to prevent chikungunya. The best way to prevent chikungunya virus infection is to avoid mosquito bites. Air conditioning or screens on windows/doors may decrease indoor exposure to mosquitoes. Use insect repellents and wear long sleeves/pants when outdoors. Drain or empty all outdoor containers with standing water on a regular basis.

People at increased risk for severe disease should consider not traveling to areas with ongoing chikungunya outbreaks.

People infected with chikungunya or dengue should be protected from further mosquito exposure during the first seven (7) days of illness to prevent other mosquitoes from becoming infected with these viruses, thus reducing the risk of local transmission.

### **For More Information**

- General information about chikungunya virus and disease: <http://www.cdc.gov/chikungunya/>
- Chikungunya information for clinicians: [http://www.cdc.gov/chikungunya/pdfs/CHIKV\\_Clinicians.pdf](http://www.cdc.gov/chikungunya/pdfs/CHIKV_Clinicians.pdf)
- Protect Yourself from Mosquito Bites: <http://www.scdhec.gov/HomeAndEnvironment/Insects/Mosquitoes/ProtectYourselfFromBites/>
- Travel notices related to chikungunya virus: <http://wwwnc.cdc.gov/travel/notices/watch/chikungunya-saint-martin>
- Dengue clinical management guidelines: [http://whqlibdoc.who.int/publications/2009/9789241547871\\_eng.pdf](http://whqlibdoc.who.int/publications/2009/9789241547871_eng.pdf)

### **DHEC contact information for reportable diseases and reporting requirements**

Reporting of diseases is consistent with South Carolina Law requiring the reporting of diseases and conditions to your state or local public health department. (State Law # 44-29-10 and Regulation # 61-20) as per the DHEC 2014 List of Reportable Conditions available at:

<http://www.scdhec.gov/Library/CR-009025.pdf>

Federal HIPAA legislation allows disclosure of protected health information, without consent of the individual, to public health authorities to collect and receive such information for the purpose of preventing or controlling disease. (HIPAA 45 CFR §164.512).

**Mail or call reports to the Epidemiology Office in each Public Health Region.**

**LOW COUNTRY PUBLIC HEALTH REGION**

**Berkeley, Charleston, Dorchester**  
4050 Bridge View Drive, Suite 600  
N. Charleston, SC 29405  
Phone: (843) 953-0043  
Fax: (843) 953-0051  
Nights / Weekends: (843) 441-1091

**Beaufort, Colleton, Hampton, Jasper**  
219 S. Lemacks Street  
Walterboro, SC 29488  
Phone: (843) 549-1516  
Fax: (843) 549-6845  
Nights / Weekends: (843) 441-1091

**Allendale, Bamberg, Calhoun, Orangeburg**  
932 Holly Street  
Holly Hill, SC 29059  
Phone: (803) 300-2270  
Fax: (843) 549-6845  
Nights / Weekends: (843) 441-1091

**MIDLANDS PUBLIC HEALTH REGION**

**Kershaw, Lexington, Newberry, Richland**  
2000 Hampton Street  
Columbia, SC 29204  
Phone: (803) 576-2749  
Fax: (803) 576-2993  
Nights / Weekends: (888) 801-1046

**Chester, Fairfield, Lancaster, York**  
PO Box 817  
1833 Pageland Highway  
Lancaster, SC 29720  
Phone: (803) 286-9948  
Fax: (803) 286-5418  
Nights / Weekends: (888) 801-1046

**Aiken, Barnwell, Edgefield, Saluda**  
222 Beaufort Street, NE  
Aiken, SC 29801  
Phone: (803) 642-1618  
Fax: (803) 643-8386  
Nights / Weekends: (888) 801-1046

**PEE DEE PUBLIC HEALTH REGION**

**Chesterfield, Darlington, Dillon, Florence, Marlboro, Marion**  
145 E. Cheves Street  
Florence, SC 29506  
Phone: (843) 661-4830  
Fax: (843) 661-4859  
Nights / Weekends: (843) 915-8845

**Clarendon, Lee, Sumter**  
PO Box 1628  
105 North Magnolia Street  
Sumter, SC 29150  
Phone: (803) 773-5511  
Fax: (803) 775-9941  
Nights/Weekends: (843) 915-8845

**Georgetown, Horry, Williamsburg**  
1931 Industrial Park Road  
Conway, SC 29526-5482  
Phone: (843) 915-8804  
Fax: (843) 915-6502  
Nights/Weekends: (843) 915-8845

**UPSTATE PUBLIC HEALTH REGION**

**Anderson, Oconee**  
220 McGee Road  
Anderson, SC 29625  
Phone: (864) 260-5801  
Fax: (864) 260-5623  
Nights / Weekends: (866) 298-4442

**Abbeville, Greenwood, Laurens, McCormick**  
1736 S. Main Street  
Greenwood, SC 29646  
Phone: (864) 227-5947  
Fax: (864) 953-6313  
Nights / Weekends: (866) 298-4442

**Cherokee, Greenville, Pickens**  
PO Box 2507  
200 University Ridge  
Greenville, SC 29602-2507  
Phone: (864) 372-3133  
Fax: (864) 282-4373  
Nights / Weekends: (866) 298-4442

**UPSTATE PUBLIC HEALTH REGION (continued)**

**Spartanburg, Union**  
PO Box 2507  
200 University Ridge  
Greenville, SC 29602-2507  
Phone: (864) 372-3133  
Fax: (864) 282-4373  
Nights / Weekends: (866) 298-4442

**DHEC Bureau of Disease Control  
Division of Acute Disease Epidemiology**

1751 Calhoun Street  
Box 101106  
Columbia, SC 29211  
Phone: (803) 898-0861  
Fax: (803) 898-0897  
Nights / Weekends: 1-888-847-0902



[www.scdhec.gov](http://www.scdhec.gov)

**Categories of Health Alert messages:**

<b>Health Alert</b>	Conveys the highest level of importance; warrants immediate action or attention.
<b>Health Advisory</b>	Provides important information for a specific incident or situation; may not require immediate action.
<b>Health Update</b>	Provides updated information regarding an incident or situation; unlikely to require immediate action.
<b>Info Service</b>	Provides general information that is not necessarily considered to be of an emergent nature.